In the claims:

Please amend the claims as follows:

1. (Currently Amended) A method of stimulating a subterranean formation, wherein the formation comprises an acid soluble component selected from the group consisting of calcium carbonate and calcium magnesium carbonate, the method comprising the steps of:

placing a fluid comprising water and a formate ester in the formation;

determining the appropriate amount of residence time for the formate ester in the fluid to react with the acid soluble component within the subterranean formation; and

permitting the fluid to react with the formation such that the permeability of a region of the formation is increased.

2. (Original) The method of claim 1 wherein the water and the formate ester react to produce an acid.

3. (Original) The method of claim 2 wherein the reaction between the water and the formate ester is delayed until the fluid has penetrated into a region of the subterranean formation to a desired extent.

4. (Original) The method of claim 3 wherein the formate ester is selected from the group consisting of:

ethylene glycol monoformate, ethylene glycol diformate, diethylene glycol diformate, glyceryl monoformate, glyceryl diformate, glyceryl triformate, triethylene glycol diformate and formate esters of pentaerythritol.

5. (Original) The method of claim 3 further comprising the step of placing an acid in the formation.

6. (Original) The method of claim 5 wherein the step of placing the acid in the formation is performed before the step of placing the fluid in the formation.

7. (Original) The method of claim 5 wherein the step of placing the acid in the formation is performed after the step of placing the fluid in the formation.

8. (Original) The method of claim 6 wherein the acid is selected from the group consisting of hydrochloric acid and acetic acid.

9. (Original) The method of claim 3 wherein the step of placing the fluid in the formation comprises injecting the fluid into the formation at a pressure sufficient to create or extend a fracture within the formation.

10. (Original) The method of claim 3 further comprising the step of producing a hydrocarbon from the formation.

11. (Original) The method of claim 10 wherein the hydrocarbon is selected from the group consisting of oil and gas.

12. (Original) The method of claim 3 wherein the formate ester is present in the fluid in an amount in the range of from about 5% to about 65% by weight of the water therein.

13. (Original) The method of claim 3 wherein the fluid further comprises a fluid loss control additive, a de-emulsifier, an anti-sludging agent, a corrosion inhibitor, an iron control agent, or a mixture thereof.

14. (Original) The method of claim 13 wherein the fluid loss control additive comprises an aliphatic polyester, lactide, poly(lactide), poly(lactic acid), or a copolymer thereof.

15. (Cancel)

16. (Cancel)

17. (Original) The method of claim 13 wherein the fluid loss control additive is present in the fluid in an amount in the range of from about 0.1% to about 5% by weight of the fluid.

Claim 18. (Cancel)

Claim 19. (Cancel)

Claim 20. (Cancel)

Claim 21. (Cancel)

Claim 22. (Cancel)

Claim 23. (Cancel)

Claim 24. (New) A method of claim 1 wherein the step of determining the appropriate amount of residence time comprises: contacting a sample of the fluid with powdered calcium carbonate and following the kinetics of the reaction.

Claim 25. (New) A method of claim 24 wherein the step of contacting a sample of the fluid with powdered calcium carbonate is at the temperature of the subterranean formation.

Claim 26. (New) A method of claim 1 wherein the step of determining the appropriate amount of residence time comprises: monitoring the pH of a sample of the fluid.

Claim 27. (New) A method of claim 26 wherein the step of determining the appropriate amount of residence time further comprises: using the dissociation constant for

formic acid to calculate the concentration of formic acid corresponding to a pH value.

Claim 28. (New) A method of claim 1 wherein the formate ester is present in the fluid in the range from about 10% to about 16% by weight of the water therein.

Claim 29. (New) A method of claim 28 wherein the step of placing the fluid in the formation further comprises: placing the fluid in a formation having a formation temperature of about 70°F to about 80°F.